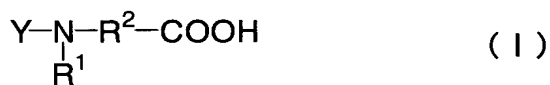


WHAT IS CLAIMED IS:

1. A planographic printing plate precursor comprising an intermediate layer containing a polymer having a structure represented by the following formula (I) at its side chain and an infrared laser photosensitive positive recording layer disposed on a support in this order:



wherein Y represents a connecting group connected with a main chain of the polymer; R¹ represents a hydrogen atom or a hydrocarbon group; and R² represents a divalent hydrocarbon group.

2. A planographic printing plate precursor according to claim 1, wherein in the formula (I), R¹ is a hydrocarbon group substituted with a carboxylic acid group, and R² is a straight-chain hydrocarbon group or an hydrocarbon group substituted with a carboxylic acid group.

3. A planographic printing plate precursor according to claim 2, wherein in the formula (I), R¹ is an alkyl group substituted with a carboxylic acid group, and R² is a straight-chain alkylene group.

4. A planographic printing plate precursor according to claim 1, wherein in the structure represented by the formula (I) is a structure

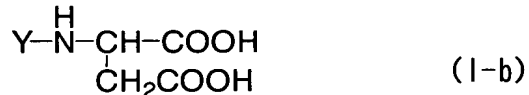
represented by the following formula (I-a), and



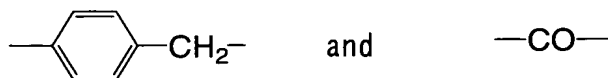
the connecting group represented by Y is a structure selected from the following structures.



5. A planographic printing plate precursor according to claim 1, wherein in the structure represented by the formula (I) is a structure represented by the following formula (I-b). and



the connecting group represented by Y is a structure selected from the following structures.



6. A planographic printing plate precursor according to claim 1, wherein a content of the structure represented by the formula (I) in the polymer is 5% by mole or more.

7. A planographic printing plate precursor according to claim 1,

wherein the polymer is a polymer obtained by copolymerizing a monomer having the structure represented by the formula (I) with another monomer.

8. A planographic printing plate precursor according to claim 7, wherein the another monomer is a monomer having an onium group.

9. A planographic printing plate precursor according to claim 7, wherein the another monomer is a monomer having an acidic group.

10. A planographic printing plate precursor according to claim 7, wherein the another monomer is a monomer having a functional group that is capable of interaction with the recording layer.

11. A planographic printing plate precursor according to claim 1, wherein a content of the polymer in the intermediate layer is 50 to 100% by mass based on a total solid content constituting the intermediate layer.

12. A planographic printing plate precursor according to claim 1, wherein a weight average molecular weight of the polymer is 500 to 1,000,000.

13. A planographic printing plate precursor according to claim 1, wherein a coating amount of the intermediate layer after drying is 1 to

100 mg/m².

14. A planographic printing plate precursor according to claim 1, wherein the recording layer contains an alkali-soluble resin.

15. A planographic printing plate precursor according to claim 14, wherein the alkali-soluble resin has an acidic group selected from the group consisting of a phenolic hydroxyl group, a sulfonamide group, a substituted sulfonamide acidic group, a carboxylic acid group, a sulfonic acid group and a phosphoric acid group.

16. A planographic printing plate precursor according to claim 1, wherein the recording layer contains an infrared absorbing agent.

17. A planographic printing plate precursor according to claim 16, wherein the infrared absorbing agent is a cyanine dye.

18. A planographic printing plate precursor according to claim 1, wherein the recording layer has a multilayer structure.

19. A planographic printing plate precursor according to claim 1, wherein the support is a support that has undergone hydrophilicizing treatment using an alkali metal silicate.